- 2. The ESP's customer premises equipment (CPE) used to receive and interpret the SMDI data must use the same signaling and data communications protocol as the telephone office Input/Output channel. This channel uses a standard Electronic Industries Association (EIA) RS232 asynchronous 1200 or 9600 baud ASCII interface.
- 3. Interconnection to the CPE is via standard outside plant cable, tip and ring connections.
- Interface Description Interface Between Customer Premises Equipment, Simplified Message Desk and Switching System: 1A ESS, Issue 1, July 1985.

## 5. References:

- Ameritech Message Signal Interface (AMSI) and Ameritech Message Signal Interface Expansion AM-TR-OAT-000065, Issue 1, July 1990.
- Technical Reference for Call Forwarding Busy Line and Call Forwarding Don't Answer can be found in GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450, Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue 1).

This service, if offered as a BSE, is associated with the Dedicated Network Access Link serving arrangement.

## Message Waiting Indicator - Activation (Visual) (1076)

This capability allows an ESP to indicate to its client that a message is waiting for retrieval. With this capability, the ESP can activate a visual alerting signal (usually a lamp) on the ESP's client's line.

Generic Name of ONA Service	Product Name	BSE or CNS
Message Waiting Indicator - Activation (Visual)	AM - Remote Activation of Message Waiting	BSE
	BA - Messaging Services Interface	BSE
	BS - SMDI	BSE
	PB - Electronic Business Set Message Waiting	BSE
	Qwest - Message Delivery Service	BSE

#### FEATURE OPERATION:

MWI - Activation (Visual) is a central office software and hardware capability that allows an ESP with CPE, to activate a visual lamp or LCD on their subscriber's line when messages are being held (see MWI - Ability to Receive Visual Message Waiting). The subscriber's line, also with special CPE and central office software/hardware, would flash at 60 IPM when activated. After a subscriber picked up their messages, the ESP would have the ability to deactivate the client's visual message waiting indicator.

Message Waiting Indication, visual or otherwise, is controlled by a software package in the central office switch, usually Simplified Message Desk Interface (SMDI) or Message Desk Service. The software package will activate or deactivate a client's message waiting indication based on signals passed over an interface from the Message Desk Provider to the central office interface.

## TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8	5E4.2*	BCS29
		*ISDN	

- 2. The lamp is off when the ESP's client is off-hook or there are no messages queued and the client is on-hook.
- 3. This feature can only be offered on an intraoffice basis.
- 4. References: Qwest reference publication 77335 "Qwest Message Waiting Indication Visual," September 1990.

This service, if offered as a BSE, is associated with the Dedicated Network Access Link basic serving arrangement.

#### Message Waiting Indicator Activation (Visual) - Expanded (1101)

When an end user subscribes to Voice Message/Reminder service the end user should have the ability to forward calls to the Enhanced Service Provider's voice messaging service, leave a detailed message for those who may be calling, and have a recorded voice message left in response. When messages are left for the end user, a message waiting indicator should be provided indicating a message is waiting. The ability to remotely activate message waiting indicator to end user's lines not located in the same central office, but in the same Local Access Transport Area (LATA) as the ESP (Voice Message Provider), is made possible through the Common Channel Signaling System 7 (SS7) network.

Generic Name of ONA Service	Product Name	BSE or CNS
Message Waiting Indicator Activation (Visual) - Expanded	AM - Remote Activation of Message Waiting - Expanded	BSE
	BA - Premier Messaging Services Interface	BSE
	Qwest - Message Delivery Service - Interoffice	BSE

#### FEATURE OPERATION:

The subscriber to the ESP's service has calls forwarded to the ESP's 7 or 10 digit telephone number. The end user can use Call Forwarding Busy Line, Call Forwarding Don't Answer, Call Forwarding Variable, or direct call to reach the ESP's voice message service. The ESP can activate a message waiting indicator for end users not served by the same central office switch as the ESP as long as the called subscriber (end user) and the ESP's central office are connected via the SS7 network and are equipped with the appropriate software packages.

# Messages from the Voice Message Provider:

Two message types may be sent by the voice message provider to the serving central office via a Dedicated Network Access Link (See: Message Desk (SMDI) - Expanded). The first message activates the Message Waiting Indicator (MWI) feature on a specified directory number, the second message deactivates the indicator. The ESP's serving central office does not acknowledge receipt of these messages unless it encounters a problem when attempting to execute the request.

There are two types of failure messages, invalid and blocked. The invalid message results from an attempt to activate or deactivate MWI on a directory number not assigned the MWI option. The failure message can also be generated when a directory number is transmitted with incomplete or inaccurate information. The blocked message indicates that the central office was momentarily unable to execute the message request.

The ESP's serving central office does not expect an acknowledgment signal indicating the activation/deactivation of MWI for the ESP.

# TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE11.03*	5E7*	BCS30*

<sup>\*</sup> ESP and end user's serving central offices must be interconnected with SS7.

- 2. The ESP's customer premises equipment (CPE) used to receive and interpret the SMDI data must use the same signaling and data communications protocol as the telephone office Input/Output channel. This channel uses a standard Electronic Industries Association (EIA) RS232 asynchronous 1200 or 9600 baud ASCII interface.
- 3. Interconnection to the CPE is via standard outside plant cable, tip and ring connections.
- 4. Interface Description Interface Between Customer Premises Equipment, Simplified Message Desk and Switching System: 1A ESS, Issue 1, July 1985.

# 5. References:

- Ameritech Message Signal Interface (AMSI) and Ameritech Message Signal Interface Expansion AM-TR-OAT-000065, Issue 1, July 1990.
- Technical Reference for Call Forwarding Busy Line and Call Forwarding Don't Answer can be found in GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450, Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue 1).

This service, if offered as a BSE, is associated with the Dedicated Network Access Link BSA.

# Network Reconfiguration (1038)

This feature provides ESPs flexibility in managing and reconfiguring their dedicated facilities. This arrangement involves providing to a customer access to a control port on a digital cross-connect system (DCS). This service enables the re-connection (grooming) of one to 24 DS0 channels within a group of DS1s such that the destination of each DS0 can be changed. Reconfiguration at higher or lower transmission speeds may also be provided. A subscriber could control their dedicated channels in any combination between locations designated on their private network.

Generic Name of ONA Service	Product Name	BSE or CNS
Network Reconfiguration	AM - Ameritech Network Reconfiguration Service	BSB
	BA - INTELLIMUX <sup>SM</sup>	BSE
	BS - FlexServ	BSE or CNS
	NX - Network Reconfiguration Service	BSE
	PB - Customer Network Reconfiguration	BSE
	SWB - Network Reconfiguration	BSE
	Qwest - COMMAND A LINK <sup>SM</sup>	BSE

## FEATURE OPERATION:

Network Reconfiguration under ESP control is initialized by setting up a database for ESP access consisting of circuit identifications, customer locations, security passwords, etc. This database is then accessed by the ESP to make their own DS1 or DS0 routing rearrangements within a Digital Cross-connect System (DCS).

#### TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

- This feature is available only in conjunction with Digital Cross-connect System (DCS) frames located in the telephone company Hub and/or Digital Serving Node locations. ESP/ESP's client facilities will have to route to the above-mentioned DCS frames.
- 2. Check with your local telephone company in order to determine availability of Extended Superframe Format (ESF) with Network Reconfiguration.
- 3. All bridging and subrating of services is to be provided outside of the DCS devices. The DCS devices are only used for cross-connecting DS0s.

# 4. References:

- TR-NWT-000170 Digital Cross-Connect System (DSC 1/0) Generic Criteria, Issue 2, January 1993.
- TR-NWT-000233 Wideband and Broadband Digital Cross-Connect Systems Generic Criteria, Issue 3, November 1993, (replaces TA-NWT-000233, Issue 4), component of FR-440.

SM INTELLIMUX is a service mark of Bell Atlantic.

<sup>&</sup>lt;sup>®</sup> FlexServ is a registered trademark of BellSouth Corporation.

SM COMMAND A LINK is a service mark of Qwest Corporation.

- Ameritech reference AM-TR-TMO-000064, Issue 2, August 1991, Ameritech Reconfiguration Interface Specifications.
- Qwest publication 77371 COMMAND A LINK<sup>SM</sup> Technical Descriptions and Interface Combinations, Issue B, November 1994.

This service, if offered as a BSE, is associated with the Dedicated Network Access Link or Dedicated High Capacity digital (1.544 Mbps) basic serving arrangements, as indicated in each individual ONA plan.

SM COMMAND A LINK is a service mark of Qwest Corporation.

UPDATED 7/31/04

# **APPENDIX 1**

July 31, 2004

1.	Appendix 1 - Region Specific Services - Technical Descriptions for Basic Serving Arrangements	
	Asynchronous Transfer Mode (ATM) Service (4031)	
	ATM Cell Relay Service (8040)	
	Direct Current (MT3) (8051)	5
	DSL Discrete Multitone Deluxe Light Service (8059)	6
	Frame Relay Service (4027,5037,8039)	7
	McCulloh Loop (8052)	8
	Owest IDSL Service (8043)	
	Owest DSL Service (8041)	
	Modem Aggregation Service (8044)	11
	Remote Access Service (4033)	
	Trunk Side Access Facility (4003)	
	Video Dialtone Access Link (3010)	14
	555 Access Service (8038)	15
2.	Appendix 1 - Region Specific Services - Technical Descriptions for Circuit Switched Serving	
Arra	angements	16
	AIN Alternate Routing (4028)	16
	AIN Terminating Data Collection/Customized Routing (4029)	17
	Automatic Disaster Recovery of DID (5010)	18
	Automatic Delivery (2019)	19
	Bridging - Line (5001)	20
	Call Denial On Line Or Hunt Group (6004)	21
	Call Detail Recording Reports - via NXX Screening (8014)	22
	Call Forwarding Originating (2003)	23
	Call Forwarding To Multiple Locations (6002)	24
	CFDA To DID Intraswitch (8022)	25
	Call Queuing (8058)	26
	Call Transfer On DID (3002,4026,8034)	27
	Call Waiting (2005,3017,4018,5005)	28
	Calling Name Delivery (8045)	30
	Calling Name Identification (8049)	31
	Dial Call Waiting (8030)	32
	Dialed Number Identification via INWATS to DID (4011,5015)	33
	DID Load Across Wire Centers (5011)	34
	Directed Call Pickup With Barge-In (8033)	35
	Directed Call Pickup Without Barge-In (8032)	36
	Distinctive Alert (8031)	37
	Easy Access (8054)	38
	Monthly Call Detail Recording (4023)	39
	Multiplexing - T1 Transport - 1.544 Mbps - Line Side (8024)	40
	Multiplexing - T1 Transport - 1.544 Mbps - Trunk Side (5013)	41
	Number Forwarding (8055)	42
	Priority Installation Service (4013)	43
	Privacy + (8047)	44
	Redirecting Name Delivery (8046)	45
	Redirecting Number Delivery (8048)	46
	Remote Call Forwarding (3004,4019,5014,8025)	47
	Remote Call Forwarding On DID Lines (8057)	48
	Security Screen (8056)	49
	Selective Call Waiting (8061)	5
	Service Code Denial On Line Or Hunt Group (6005)	
	Surrogate Client Number (4002)	
	Switched 56 Kilobit Service (3019,4021,5036)	
	Third Number Billing Inhibited (4012,7067)	55
	Three Way Calling (3020,4020,5019,8028)	5f
	Traces That Descrite (4016 5017 9016)	- 58

	Transmission Improvement for Circuit Switched Services (8012)	
	Wireless Extension (8060)	60
3.	Appendix 1 - Region Specific Services - Technical Descriptions for Packet Switched Access	
Arr	angements	
	Abbreviated Call - Packet (8036)	
	Default Window Size - Packet (5022,8007)	
	Flow Control Parameter Negotiation - Packet (8003)	63
	Incoming Calls Barred - Packet (5024,8001)	64
	Logical Channels - Packet (8005)	65
	Logical Channel Layout - Packet (8004)	66
	Multiple Network Addresses/Port - Packet (3001,5027,8006)	67
	Outgoing Calls Barred (5028,8002)	68
	Permanent Virtual Circuit - Packet (5029,8008)	69
	Reverse Charge Request Option (Packet) (5030,8009)	70
4.	Appendix 1 - Region Specific Services - Technical Descriptions for Dedicated Access Arrangements.	
	Access To Customer Premises Announcement (5035)	
	Access To Order Entry System (4004)	72
	ADSL Service (4032)	73
	DS0-B Subrate Multiplexing Service (4015)	74
	High Capacity Digital Hand-Off Service (3026)	
	Inband Signaling (3018)	76
	Multiplexing - Digital (2000,2001,2002,2018,3005,4007,5034,7034,8013)	7 <b>7</b>
	User Initiated Diagnostics (4009)	79
	Versanet (8053)	80
5.	Appendix 1 - Region Specific Services - Technical Descriptions for Dedicated Network Access Link	
Ser	ving Arrangements	81
	Order Entry Service (8011)	81
	Initial Address Message (2006)	82
	Coordinated Voice and Data Acceptance (2007)	84
	Computer Assisted Dialing Acceptance (2010)	85
	Computer Assisted Call Transfer Acceptance (2009)	86
	Call Redirection Acceptance (2008)	87
	Video Dialtone Broadcast Service Channels (3011)	88
	Video Dialtone Messaging Port (3013)	89
	Video Dieltone Normewood Convice Channels (3012)	90

# 1. Appendix 1 - Region Specific Services - Technical Descriptions for Basic Serving Arrangements

# Asynchronous Transfer Mode (ATM) Service (4031)

Asynchronous Transfer Mode (ATM) Service is a connection-oriented data transport service based on ATM cell-based switching technology.

ATM Service provides flexible connectivity using virtual connections implemented over digital facilities operating at transmission speeds of 1.536 Mbps, 44.210 Mbps, 149.760 Mbps or 599.040 Mbps. This service provides for the switching of symmetrical duplex transmissions of fixed-length ATM cells, utilizing virtual connections. As ATM is a connection-oriented service, to transfer information a virtual connection must be set up across the ATM network. ATM Service supports permanent virtual connections.

Information transmitted by ATM Service is segmented into fixed length cells, transported to and re-assembled at the destination. The ATM cell has a fixed length of 53 bytes. An ATM cell is broken into two main sections, the header and the payload. The payload is the portion that carries the actual information. The header is used for network functions such as addressing and error correction.

Generic Name of ONA Service	Product Name	
Asynchronous Transfer Mode (ATM) Service	BS – Asynchronous Transfer Mode	BSA

## References:

- ATM Forum documents, "ATM User-Network Interface Specification" (Versions 3.0 and 3.1)
- BellSouth Technical Reference 73585, "Asynchronous Transfer Mode (ATM) Network Interface and Performance Specifications."

# ATM Cell Relay Service (8040)

ATM Cell Relay Service (ATM CRS) is a connection-oriented communications service that uses Asynchronous Transfer Mode (ATM) technology. The service provides customers with high-speed, low-delay information transfer capacity, which supports applications that require near-real-time mixed media (data, video, image, voice) communications among multiple locations. ATM CRS supports transmission speeds of either up to 45 Mbps or up to 155 Mbps.

ATM CRS requires the use of customer terminal equipment that functions as a multiplexer/router/hub or ATM switch. This terminal equipment must be purchased separately from the ATM CRS and must conform to industry standards. The terminal equipment accumulates customer traffic and puts it into a cell relay format suitable for transmission over the ATM CRS Network.

ATM CRS conforms to industry standards and is only provided over fiber optic facilities. Technical Specifications for ATM CRS are delineated in Technical Publication PUB 77378 (Qwest).

Generic Name of ONA Service	Product Name	
ATM Cell Relay Service	Qwest - ATM Cell Relay Service	BSA

# Direct Current (MT3) (8051)

Direct Current (MT3) is a low-speed data private line transport service for alarm applications. It is provided over metallic facilities on a two-point or a multi-point basis. MT3 is available on an interstate basis. It may also be available on an intrastate basis (consult the appropriate Tariff Reference data to determine exact state availability).

Generic Name of ONA Service	Product Name	BSE or CNS
Direct Current (MT3)	Qwest - Direct Current (MT3)	BSA

# DSL Discrete Multitone Deluxe Light Service (8059)

Digital Subscriber Line (DSL) Discrete Multitone Deluxe Light Service utilizes Digital Subscriber Line (DSL) technology. It will be a dedicated 256 Kbps downstream and 128 Kbps to 256 Kbps upstream service.

Please refer to appropriate telephone company tariffs to determine availability and any service restrictions.

Generic Name of ONA Service	Product Name	
DSL Discrete Multitone Deluxe Light Service	Qwest - DSL Discrete Multitone Deluxe Light Service	BSA/BSE

References: not available.

# Frame Relay Service (4027,5037,8039)

This service provides fast packet transmission of customer data to and among Local Area Networks and host computers. Using statistical multiplexing, it allows customers to allocate circuit bandwidth to applications as needed and as available. Variable length frames are relayed from the source to the desired destination by means of virtual connections which are established at the time of subscription via Service Order.

This arrangement requires the use of separately purchased customer provided terminal equipment that functions as a multiplexer/bridge/router. The terminal equipment accumulates customer data and puts it into a frame relay format for transmission over the Frame Relay Network.

Generic Name of ONA Service	Product Name	
Frame Relay Service	BS - Exchange Access Frame Relay Service	BSA
	NX - Frame Relay Service	BSA
	Qwest - Frame Relay Service	BSA

# References:

- TR-TSV-001369 Generic Requirements for Frame Relay PVC Exchange Service, Issue 1, May 1993
- TR-TSV-001370 Generic Requirements for Exchange Access Frame Relay PVC Service, Issue 1, May 1993

# McCulloh Loop (8052)

McCulloh Loop (LS2) is a low-speed voice grade, private line data service for alarm applications at speeds of 0-30 baud or -150 baud. McCulloh bridging permits bridging for multi-point applications. The cable facility used must be a metallic cable pair. Up to twenty-six locations can be bridged on one circuit. LS2 is available on an interstate basis. It may also be available on an intrastate basis (consult the appropriate Tariff Reference data to determine exact state availability).

Generic Name of ONA Service	Product Name	BSE or CNS	
McCulloh Loop (LS2)	Qwest - McCulloh Loop (LS2)	BSA	

# **Qwest IDSL Service (8043)**

Qwest ISDN Digital Subscriber Line ("Qwest IDSL") Service provides a data only, two-wire, private line service with a bi-directional data transmission capacity of 128 kbps or 144 kbps. Each Qwest IDSL must be connected to a Qwest DSL Host Service. Qwest IDSL provides the teleworker with a link/access to the end user's business local area network, enabling work-based activities, such as work-at-home capabilities and access to Internet service providers. Qwest IDSL is only available on an interstate basis.

Generic Name of ONA Service	Product Name	BSE or CNS
Qwest IDSL Service	Qwest - Qwest IDSL Service	BSA

# **Qwest DSL Service (8041)**

Qwest DSL Service utilizes Digital Subscriber Line (DSL) technology to provide customers with both voice and high-speed data services over metallic local loop facilities. This service allows the Company to accept traffic from the customer and separate the voice from the data, sending each type of traffic to the appropriate, separate network.

Qwest DSL Service allows the end user to transmit data at peak bandwidths ranging from 256 kbps to 7 Mbps. Multiple end users' data transmissions are aggregated onto a central office hub transmitting at peak bandwidths of 1.544 Mbps, or 3 Mbps up to 45 Mbps (in 3 Mbps increments).

Generic Name of ONA Service	Product Name	
Qwest DSL Service	Qwest - Qwest DSL Host Service	BSA/BSE
	Qwest - Qwest DSL Service	CNS

References: Technical specifications for Qwest DSL Service are delineated in Qwest Technical Specification Paper #60000-006 CAP RADSL (Netspeed).

# **Modem Aggregation Service (8044)**

Modem Aggregation Service ("MAS") provides ESPs the ability to use Telephone Company-provided modems that are located in the Telephone Company central offices. MAS provides a dial-in number and a specified number of modems (in groups of ten), which the ESP can make available to their end users in order to provide dial-in access to the ESP's data network. End-user calls in excess of the subscribed-to number of modems will receive a subscriber busy signal. Connectivity between the modems and the customer's network is provided via standard Frame Relay Service ("FRS") or ATM Cell Relay Service ("CRS"). MAS requires the use of customer-provided equipment, located at the ESP's location, to interface with the end-user modem traffic that is being delivered over the FRS or ATM CRS to the ESP location. MAS is only available on an interstate basis.

Generic Name of ONA Service	Product Name	BSE or CNS	
Modem Aggregation Service	Qwest - Modem Aggregation Service	BSA	

# Remote Access Service (4033)

Remote Access Service is a customer-controlled service that supports a dedicated, customer selected remote access server with backup dial-in capability for network management. Remote Access Service provides one-way ports for the collection, concentration, signaling and aggregation of an information service provider's (ISP's) dial-up data traffic into a hub site. This option will allow an ISP's end-user customer to call into a remote access server. Remote Access Service is available on an interstate and intrastate basis.

Generic Name of ONA Service	Product Name	BSE or CNS
Remote Access Service	BS - BellSouth Remote Access Service	BSA

# Trunk Side Access Facility (4003)

This capability provides a trunk side connection from a Traffic Operator Position System (TOPS) Tandem switch to an ESP's premises. This connection will be a dedicated one way trunk group from each of the TOPS Tandem switches serving the end offices the ESP wishes to receive traffic from. This trunk group is designed to deliver the called number (UAN) and calling line ANI from the TOPS Tandem switch to the ESP. Feature Group D-like signaling will be used to communicate with the ESPs CPE.

This capability will only be available in the General Subscribers Services Tariff and only in conjunction with Uniform Access Number.

Generic Name of ONA Service	Product Name	
Trunk Side Access Facility	BS - Trunk Side Access Facility	BSA

References: not available.

# Video Dialtone Access Link (3010)

A Video Dialtone Service that provides for the transport of video and other programming signals.

Generic Name of ONA Service	Product Name	
Video Dialtone Access Link	BA - VDT - Access Link	BSA

# FEATURE OPERATION:

Video Dialtone Direct Access Link provides a connection from the Programmer-Customer's designated location to a Telephone Company Video Distribution Office and is capable of transporting up to a maximum of ninety-six (96) 6 megabyte/sec MPEG2 [MPEG - Motion Picture Experts Group] digital signals. Video Dialtone Access Links are one-way, from the Programmer-Customer to the Video Dialtone Distribution Office, and require that the Programmer-Customer meet the interface specifications found in Bell Atlantic Technical Publication TR-72550.

#### TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

For interface publications, see Bell Atlantic Technical Publications TR-72550 and TR-72211.

Also see BroadBand Technologies Technical Publication TESP-0106. Contact information for BroadBand Technologies, Inc.:

BroadBand Technologies, Inc.

Suite 150, Triangle Business Center

4024 Stirup Creek Drive

Durham, NC 27703

Post Office Box 13737

Research Triangle Park, NC 27709-3737

Telephone: 919 544-0015

Fax: 919 544-5356

This service is offered where available and facilities permit.

#### 555 Access Service (8038)

This service provides access to ESPs by their clients using a 555-XXXX telephone number. The service enables the ESP to have a uniform, LATA-wide, 10 digit (NPA-555-XXXX) telephone number. The same 555 number could be used in multiple LATAs where service is available.

Generic Name of ONA Service	Product Name	BSE or CNS
555 Access Service	Qwest - 555 Access Service	BSA

## FEATURE OPERATION:

- When a caller dials the unique 555 telephone number (1-NPA-555-XXXX) within a LATA, the call is routed to
  the caller's originating end office and then to the associated Traffic Operator Position Switch (TOPS) that
  serves the end office.
- 2. At the TOPS tandem the 555 call is translated into a unique 800 NXX-XXXX telephone number which is associated with each 555 telephone number or group of 555 telephone numbers. (The 800 telephone number is obtained by the 555 service subscriber.) [Note: 888, 877, 866, and 855 are now equivalent to 800.]
- 3. After the call is translated into an 800 telephone number, the 800 database is queried to identify the 555 Service subscriber's call routing instructions.
- 4. The 555 call is then routed in the standard Feature Group D format which includes the calling number, the called number (800 telephone number) and Automated Number Identification (ANI) information digits. ANI information digits are the digits that precede the calling number on the ANI record. ANI information digits inform the 555 Service subscriber of the calling party's class of service for billing, routing and other special handling purposes.

## TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

- The calling party, the TOPS tandem and the 555 subscriber's routing point must be in the same LATA. The
  routing point can be either the 555 subscriber's location or to their carrier of choice. In LATAs where more
  than one TOPS tandem is present, the 555 Service subscriber must subscribe to 555 Service from both TOPS
  tandems.
- 2. Calls from outside the LATA will be blocked. Blocking also applies to "0 minus" (e.g., for the hearing impaired, etc.), "0+" calls, and restricted classes of service.
- This capability is currently available only from suitably equipped DMS-200 Traffic Operator Position Switches.

# 2. Appendix 1 - Region Specific Services - Technical Descriptions for Circuit Switched Serving Arrangements

# AIN Alternate Routing (4028)

This service allows customers to establish predetermined alternate routing plans for incoming voice and data traffic (e.g., MLHG, DID). Incoming calls can be rerouted to multiple (or a different) locations and/or announcements during varied emergency situations.

Generic Name of ONA Service	Product Name	BSE or CNS
AIN Alternate Routing	BS - CrisisLink <sup>SM</sup>	CNS

#### FEATURE OPERATION:

At the time this service is established, the customer predefines a set of directory numbers (DNs) to be protected in the event of a crisis. All DNs in the set receive the same default alternate handling when the service is activated. The DN set is loaded through the AIN Service Management System (SMS) into the Switching Control Point (SCP), where it remains dormant until activated via customer request to the Service Center. When a customer calls to activate their service, they may activate their default treatment, or may specify changes at the time of activation.

As an example, the incoming calls to a customer can be rerouted to the predefined DNs as follows:

<ul> <li>— A% of calls are redirected to Backup DN</li> </ul>	_ A	١%	of	calls	are	redirected	to	Backup	DN
---	-----	----	----	-------	-----	------------	----	--------	----

- B% of calls are redirected to Backup DN 2
- C% of calls are redirected to Backup DN 3
- D% of calls are redirected to a DN associated with a customized announcement
- E% of calls are completed to the number originally dialed (partial crisis/restore)
- F% of calls are sent to a standard switch based announcement

This service uses two AIN 0.1 triggers: the Public Office Dialing Plan (PODP) trigger and the Termination Attempt Trigger (TAT). The distinction between the two is as follows:

- A PODP trigger is assigned to DNs which are served by a 5ESS terminating SSP (ASP Release 0.1B or later).
- A TAT is assigned to DNs which are served by a DMS-100 terminating SSP (NA003 or later).

SM CrisisLink is a service mark of BellSouth Corporation.

# AIN Terminating Data Collection/Customized Routing (4029)

This service provides a customer with pertinent terminating traffic data information as well as the capability for customized routing arrangements.

Generic Name of ONA Service	Product Name	BSE or CNS
AIN Traffic Data/Routing	BS - Virtual Number Call Detail VNCD formerly AdWatch	CNS

## FEATURE OPERATION:

The customer's Directory Number (DN) becomes a "virtual" number either by reusing the customer's existing number (if it resides in a 5ESS switch), or by assigning the customer a new number in a 5ESS switch.

The customer's "virtual" number is listed as the customer's number in the Directory. Calls directory to this number can be handled as follows:

## Data Collection

- counts of calls made to the virtual number including the calling party number
- call detail based on calls that receive busy or don't answer
- the customer is able to access the service via a VT100 terminal at up to 19.2 kbps, and the customer will be able to view and download call records.

# Routing Functionality

- routing by day of week/time of day/% distribution to up to three locations
- routing from the virtual number to a set of locations based on geographic origination of the call

<sup>\*</sup> AdWatch is a registered trademark of BellSouth Corporation.

# **Automatic Disaster Recovery of DID (5010)**

This capability enables an ESP with multiple wire centers to provision the same Direct Inward Dialing (DID) numbers to automatically transfer to an alternate wire center in the event of a failure. The DID number will reside at the normal serving wire center. The wire centers must be connected by 1.544 Mbps interoffice facilities.

Generic Name of ONA Service	Product Name	BSE or CNS
Automatic Disaster Recovery of DID	NX - DID/DOD Disaster Recovery Service	BSE

## FEATURE OPERATION:

This feature is activated in the event of a failure in the loop between the normal wire center and the customer premises. Incoming calls to lines connected to the normal wire center will be rerouted over the 1.544 Mbps trunks to the alternate wire center for completion. PBX customers obtain DID service from their normal serving wire center and an alternate wire center designated by the telephone company. DID service from the normal wire center and the alternate wire center will share an NXX that will reside at the normal wire center.

## TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	5ESS	DMS-100
Earliest Generic Release	5E2	BCS27

2. Outgoing calls from the alternate wire center will not be affected.